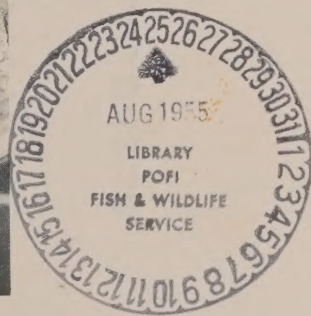


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NO. 424

HOUSEHOLD CONSUMER PREFERENCES for BREADED SHRIMP & BREADED FISH STICKS

PART 1 NATIONAL AND REGIONAL SUMMARY



FISH AND WILDLIFE SERVICE
United States Department of the Interior
Washington, D. C.



Fishery Leaflet 424

United States Department of the Interior, Douglas McKay, Secretary
Fish and Wildlife Service, John L. Farley, Director

Fishery Leaflet 424

Washington 25, D. C.

July 1955

HOUSEHOLD CONSUMER PREFERENCES

FOR

BREADED SHRIMP AND BREADED FISH STICKS

Part I - National and Regional Summary

Prepared by Richard A. Kahn* and Walter H. Stolting**

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Graphs by G. T. Sundstrom

* Chief) Economics and Cooperative Marketing Section
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INTRODUCTION

This is the first in a series of reports resulting from a nationwide survey of household consumer preferences for breaded shrimp and breaded fish sticks. The survey was made by National Family Opinion, Inc., Toledo, Ohio, in November 1954 under the direction of the Fish and Wildlife Service. Some additional supporting information about home and restaurant consumption of fish and shellfish was obtained also.

Some important developments in the marketing of fishery products have occurred in recent years. Outstanding is the fact that frozen breaded fish sticks and, to a lesser extent, frozen breaded shrimp have made spectacular sales advances. Fish stick production jumped from 7.5 million pounds in 1953 to about 50 million pounds in 1954 and the first quarter of 1955 is well ahead of the corresponding quarter last year. Breaded shrimp production started in a small way after World War II, rose very rapidly, and currently appears to have leveled off in 1954 at about 17 million pounds annually.

The fishing industry hopes that these favorable developments are based on permanent and perhaps expanding markets for fish sticks and shrimp. Reliable information has been lacking at the consumer level to provide the basis for examination of the marketing prospects for breaded shrimp and fish sticks. For the same reason the significance of the phenomenal sales of these products in relation to the market for other fish products could not be evaluated. In the latter connection, the fragmentary information available has been used to support diametrically opposite opinions as to whether or not fish stick sales represent supplementary purchases or substitutions for other fish products.

This report summarizes the information obtained from the survey on a national and regional basis only. Two additional Fishery Leaflets will be issued, summarizing the data analyzed in several other ways. Fishery Leaflet No. 425 will present an analysis of the replies, with respondents classified by farm and nonfarm groups, by rural groups and by cities of various sizes. Fishery Leaflet No. 426 will present an analysis of the replies with respondents classified as to the various ages of the homemaker, the size of the family, the occupation of the head of the household, and the family income group.

Special effort has been made to be as specific as possible in presenting conclusions and in presenting them in a way most likely to be of practical value to the fishing industry. Obviously, it is possible to draw somewhat different conclusions depending upon the weight given to the significance of certain details, and the limitation placed upon some segments of the data. For this reason a copy of the questionnaire and all the original data, together with an account of the survey methods and characteristics of the data, are published in the appendix.

INTRODUCTION - Continued

Briefly, the survey represents the tabulated results of a mailed questionnaire to 1,797 selected respondents, predominantly housewives, so chosen as to be representative of all households in the United States. For example, in this report on national and regional analysis, approximately the same stratification of various classes of households will occur for each region as the percentage of all households in a region bears to all households in the United States.

Summary

Only about one homemaker in five uses breaded shrimp.

A high percentage of all homemakers trying either cooked or uncooked breaded shrimp become satisfied customers.

The survey suggests that store demonstrations would be effective in market promotion.

Fish sticks are used in less than 40 percent of all American households.

The prospects for expanding the market are favorable.

Most consumers are indifferent about the variety of fish used in making fish sticks.

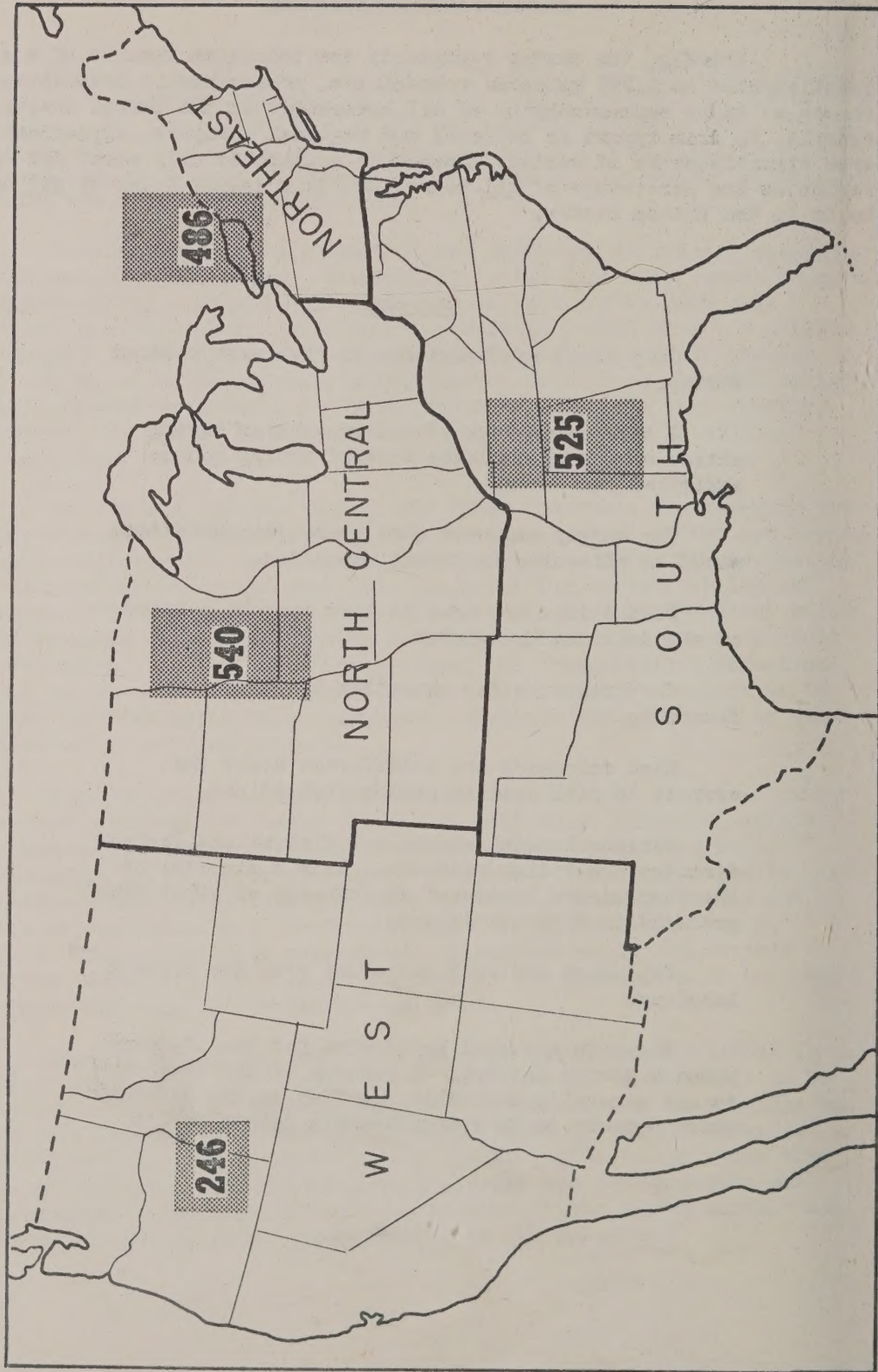
Neither breaded shrimp nor fish sticks replace directly other fish products. Only a minority of the respondents indicated replacement of other fish products to a lesser degree.

Consumers are well satisfied with the present labeling.

There is a marked preference for the 12-ounce breaded shrimp package. A package of the same size is not generally available for fish sticks although there appears to be a considerable demand for it.

REGIONAL PARTICIPATION IN THIS CONSUMPTION SURVEY

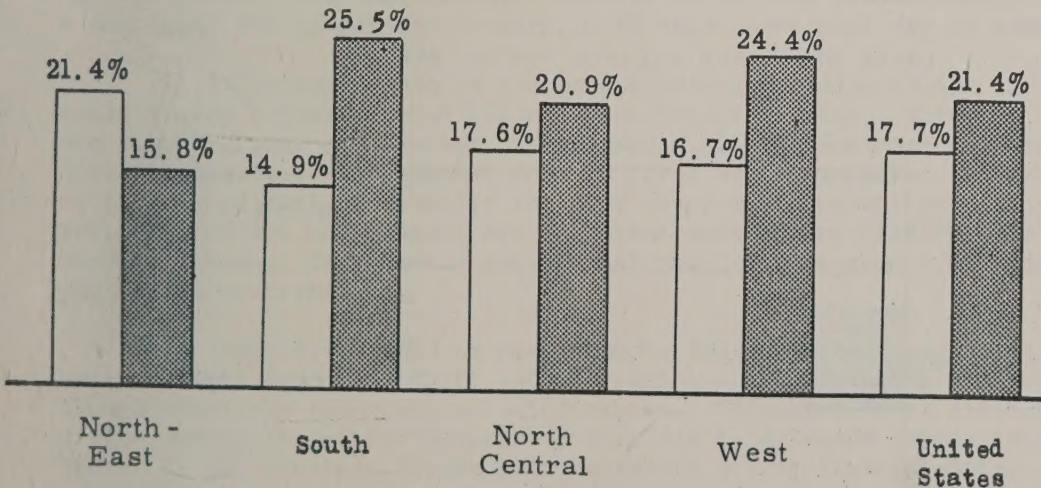
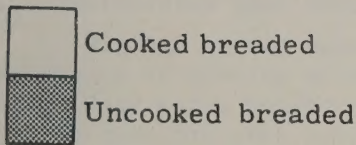
Number of families responding



Breaded Shrimp Consumption

Only about one in five families in the United States are currently using breaded shrimp. The proportion runs slightly lower for cooked shrimp and slightly higher for uncooked. There are some significant regional differences in the consumption pattern for both products. In the Southern States consumption is the highest in the country for uncooked shrimp and the lowest for cooked. Western consumers also prefer uncooked to cooked shrimp but in the Northeastern States the reverse is true.

FAMILIES CONSUMING COOKED AND UNCOOKED BREADED SHRIMP
(By percent and areas)

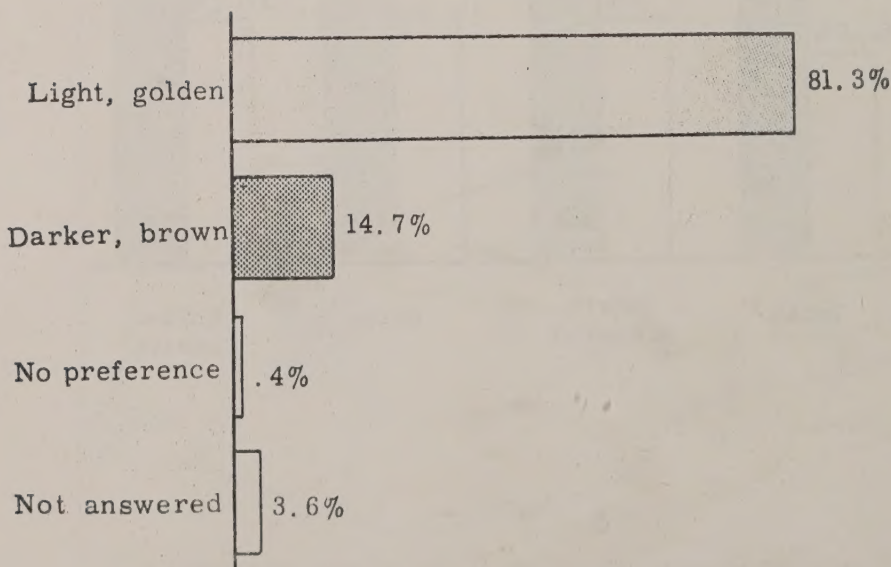


Breaded Shrimp Consumption - Continued

The basic merchandising problems appears to be to get housewives to try the product. There is reason to believe promotional efforts should be directed toward store food demonstrations. Some 50 to 60 percent of all respondents who had not tried breaded shrimp gave reasons. About 23 percent indicated an aversion for cooked shrimp and 19 percent an aversion for the uncooked shrimp. This percentage was highest for both products in the North Central States. About 12 percent of the respondents were either unfamiliar with cooked breaded shrimp or the product was not available to them. It is significant that price considerations were only minor factors for either product.

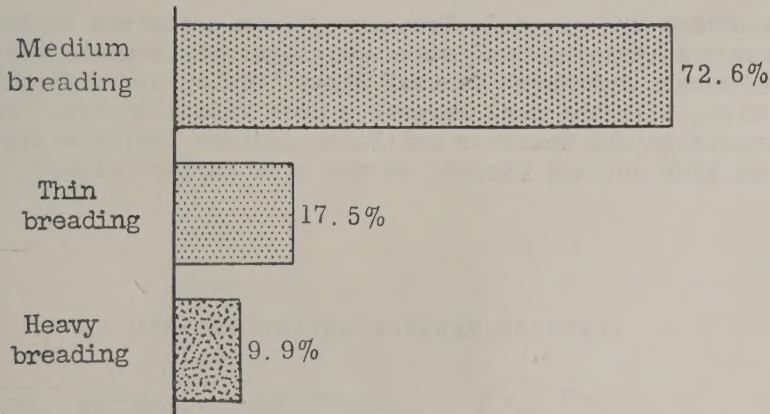
Breaded shrimp do not directly replace consumption of other fishery products. In any event, the respondents were emphatic on this point, irrespective of region or for either the cooked or uncooked product. In fact, around 75 percent of the respondents claimed that their consumption of breaded shrimp did not replace other fish products even in some degree. A small minority named a scattered variety of other fish products which they substituted for breaded shrimp at least to some extent.

COLOR OF COOKED BREADED SHRIMP DESIRED



Breaded Shrimp Consumption - Continued

BREADING OF SHRIMP DESIRED



Breaded shrimp consumers have a comparatively rigid schedule in the frequency of serving which applies to both the cooked and uncooked product. Only a few homemakers serve shrimp over three times per month and most serve them not over twice a month. Apparently, regional differences in this pattern are unimportant. Breaded shrimp are predominantly used as a main meal throughout the country, with only occasional use as snacks.

Individual taste is the predominating deciding factor in consumer choice between cooked and uncooked breaded shrimp. However, there are some regional differences. For example, in the Southern and Western States housewives are somewhat more in favor of the uncooked. Proponents of the cooked variety consider the time saved an important point while proponents of the raw product are convinced that shrimp taste better when cooked at home. There are a substantial number of consumers with no particular preference.

Individual taste is also a major factor in consumer choice between fantail (with tailshell left on) and completely peeled shrimp, although there are some regional differences. Consumers favor strongly peeled shrimp in the Northeastern States and to a lesser extent in the West. In the Southern States more consumers prefer fantail shrimp.

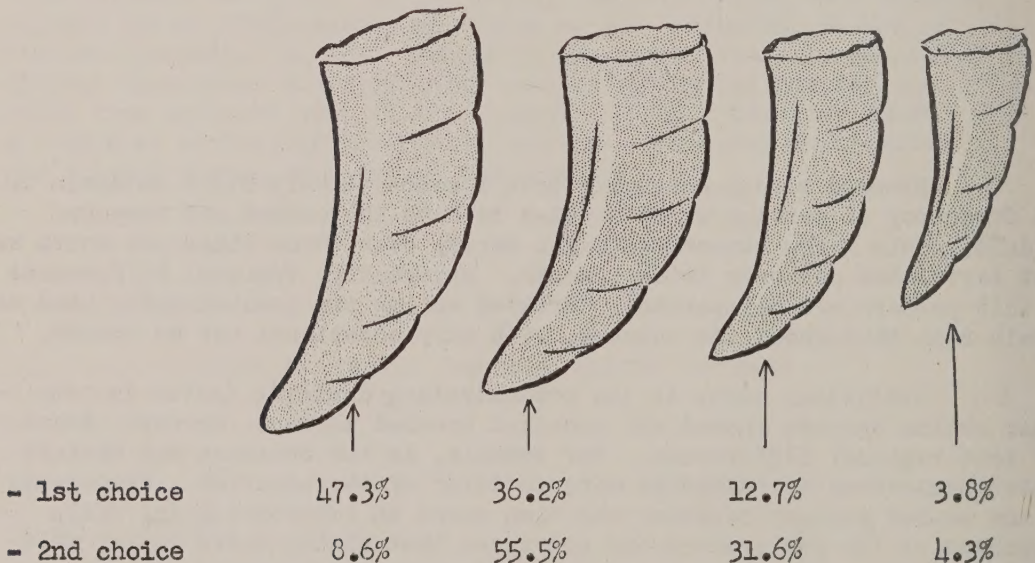
In sharp contrast to the individualistic approach to some aspects of breaded shrimp marketing, consumers are preponderately in favor of medium breaded shrimp if offered a choice of thin, medium, and heavy breading. Moreover, consumers favor strongly light, golden cooked shrimp as against

Breaded Shrimp Consumption - Continued

darker cooked shrimp, and shrimp packaged in layers separated by paper as against bulk packing. There is a marked preference for the 12-ounce package with the 10-ounce package in second place.

Assuming that the grocer's freezer cabinet contained breaded shrimp with packages containing four sizes ranging from large to very small, consumers in the Western and North Central States would most probably pick out the largest size, with the next largest a poor second choice. On the other hand, consumers in the Southern and North Central States would be about as likely to pick out the largest as the next largest size.

SIZES OF BREADED SHRIMP DESIRED

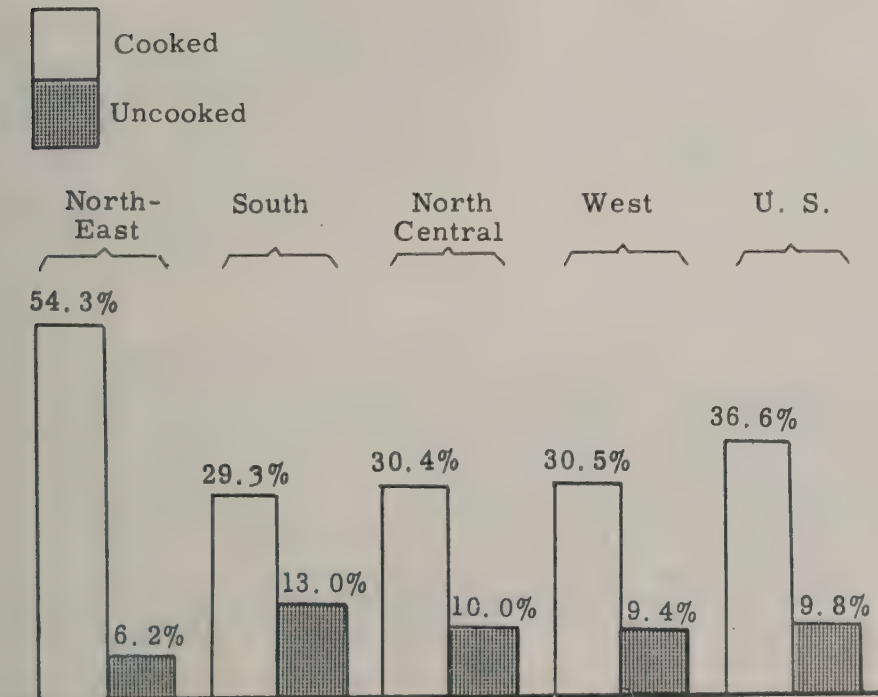


Consumers are well satisfied with the present package labeling with respect to description of contents, manner in which to prepare contents, and suggested recipes.

Breaded Fish Stick Consumption

Less than 40 percent of all American households served fish sticks during the past year despite the phenomenal growth of this business. Consumers are familiar mainly with cooked fish sticks. The uncooked variety is a relatively small trade representing about 11 percent of total fish stick production and with the greatest market in the South.

FAMILIES CONSUMING COOKED AND UNCOOKED FISH STICKS
(By percent and areas)



Breaded Fish Stick Consumption - Continued

The survey suggests that there is still plenty of room for further expansion of the fish stick business. Roughly 60 percent of American households represents the size of the untapped market. Consumer acceptance rate is very high. Something like 85 percent of all homemakers buying fish sticks are satisfied with them.

The survey provides a basis for observations on the probable effects of trade promotion of fish sticks. The response to questions probing the reasons why housewives have not tried fish sticks relate mainly to problems of inertia. At any rate, the price problem, aversion for the product, preference for other fish products, and dietary considerations are unimportant hurdles in getting housewives to try fish sticks.

In most households cooked fish sticks do not replace other fishery products. Some 70 percent of the respondents claimed that cooked fish sticks do not replace other fish products even in some degree. The minority admitted, however, that substitution occurred to some extent, particularly for fresh and frozen fish.

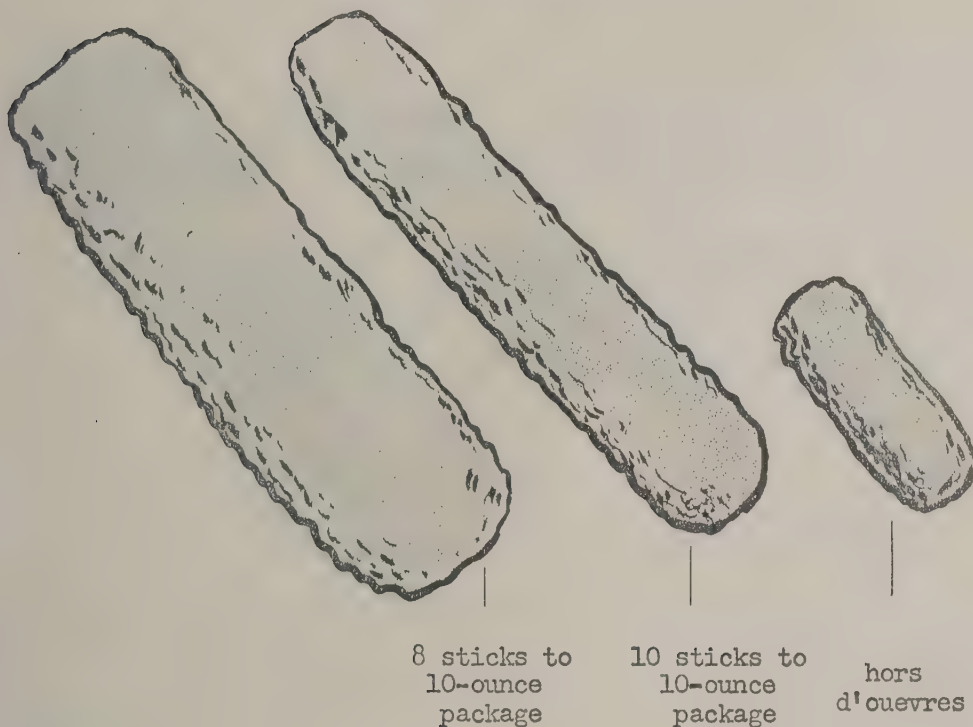
Most homemakers are indifferent about the kind of fish contained in the fish stick. In the North Central States consumers were slightly more concerned with the species of fish used in the fish sticks they bought, but in the Western States about 70 percent were indifferent in this matter. Housewives buy fish sticks as a distinct product rather than a variety of fish. A question framed from the passive viewpoint underlines this indifference to the kind of fish used as ingredients in fish sticks. About 85 percent of the respondents answering the question said "no" to the question "Are there any kind (species) of fish from which fish sticks are made that you do not like?"

Frequency of serving for fish sticks follows somewhat the traditional once-a-week pattern of the fresh fish market. The number of families serving fish sticks more than four times a month falls off into insignificant figures. About 60 percent of all households using fish sticks served them three times per month or less, and 50 percent twice a month, or less. Only minor differences in the frequency of serving pattern occurred as between regions of the country.

Fish sticks are used principally for the main meal in all regions. There is a minor and occasional use for fish sticks as snacks and hors d'oeuvres.

Breaded Fish Stick Consumption - Continued

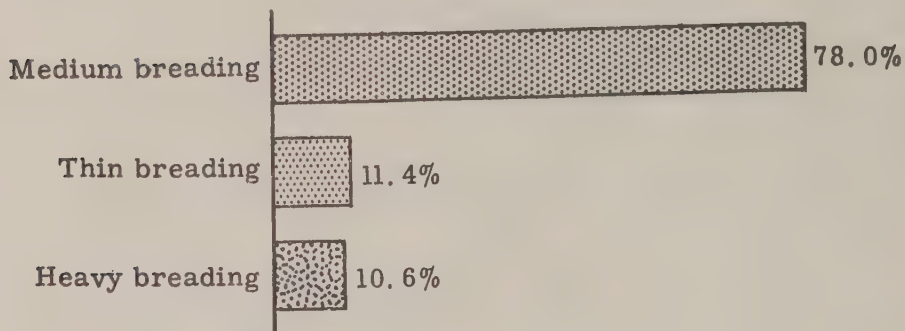
SIZES OF FISH STICKS DESIRED



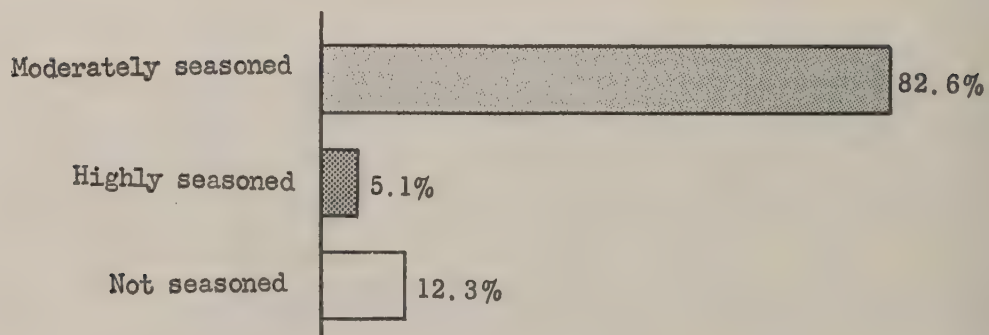
On the whole, housewives are well satisfied with the present labeling of fish sticks with respect to description of package contents, directions for preparation and suggested recipes. In all areas housewives favor 8 sticks to the 10-ounce package with the 10 sticks to the 10-ounce package a close second choice. Fish sticks are commonly marketed in 8, 10, 16, and 24-ounce packages. Homemakers indicated a strong demand for a 12-ounce package. Consumers prefer chiefly medium breading and moderate seasoning. In the Southern States there is some demand for a highly seasoned product, but for the United States as a whole, about 12 percent of the housewives prefer no seasoning.

Breaded Fish Stick Consumption - Continued

BREADING OF FISH STICKS DESIRED



SEASONING OF FISH STICKS DESIRED



Family Home Consumption of Fish and Shellfish

The number of homes serving fish or shellfish as main meals at least once a month ranges from about 70 percent to 85 percent. This percentage is lowest in the South and highest in North Eastern States. The number of homes serving fish or shellfish more than four times a month is quite small. Probably about one out of five American homes do not serve fish or shellfish at all, or only occasionally.

Roughly 40 percent of all American homes will serve fish or shellfish any time of the year irrespective of season. In Western States fish or shellfish are consumed more often in the summer months and this custom is followed to some extent in other areas. In the North Eastern and North Central States consumption is concentrated in the Lenten period.

Family Consumption in Restaurants of Fish and Shellfish

Fish restaurants and restaurants in general are an important market for fish and shellfish. In a sense, however, a considerable part of fish consumption in restaurants is complimentary to fish consumption at home. Typically, families visit restaurants as a group for the specific purpose of having a fish dinner and motivated by such factors as the desire to escape some of the discomforts of preparing and cooking fish at home, the greater selection of fish dishes available and the reputed proficiency of restaurant fish cookery.

The survey indicates about 65 percent of all American families, as a group, ate in restaurants at least once during the month of October 1954. About 80 percent of these families ordered fish or shellfish at least once during the month. The figure ranges from about 75 percent in the North Central region to as high as 90 percent in the Western States. In general, most families order fish and shellfish in restaurants the year around, although in some areas the warm weather in the summer months influences favorably this decision.

Survey Methods and Characteristics

A copy of the questionnaire which was used in the survey is reproduced in the appendix. The persons who received and filled out the questionnaire were predominantly housewives. All of the persons selected were members of two panels maintained by National Family Opinion, Inc. Each of the panels contained 1,000 members. A total of 2,000 questionnaires were mailed out and 1,797 were returned usable. The households on the panels were selected to be representative of all the households in the United States. Certain controls were exercised in the selection of panels so that each is composed of the same proportion of different classes as exist in the makeup of all households in the United States. For example, approximately the same percentage of households will occur for each region as the percentage of all households in a region to all households in the United States. In addition, controls are exercised over distribution of the households among various sized communities, among various income groups of households, and among homemakers of various ages. The panels are stratified, therefore, to this degree. The sample for this survey, as taken from the two panels, represents by judgment a close approximation of the households of the nation. It is not a probability sample, however, and definite error limits cannot be ascribed to any of the results.

Tabulations of the replies to the questionnaires on a national and regional basis are given in the following pages. The summaries of the replies for each question analyzed are given in percentages. Because of their nature, some of the questions were asked only part of the total number of respondents and the summaries are made accordingly. The number of respondents asked a particular question is given at the end of the summary. Some of the summaries are necessarily based on the number of answers given to the question, since in a mail survey sufficient control could not be exercised in the field work so that respondents who replied to the particular question could be adequately identified. Because of this and some other reasons, summaries to such questions had to be made on the basis of the total number of answers given in the survey. In these cases, the number of answers to a particular question is also given at the end of the summary. Such summaries, like all the others, are given in percentages. When the answers to any of the questions are desired on a unit basis rather than percentages, apply the percentages to the figure given beside "number asked" or "number of answers" at the end of a particular summary.

National Family Opinion



Dear Consultant:

This questionnaire is about fish (for example haddock, whitefish, salmon, swordfish, etc.) and shellfish (shrimp, oysters, lobster, crab meat, etc.). Although the questionnaire looks quite long, I think you will find it easy to answer after you have read the directions on it carefully.

SECTION I has to do with your family's use of Frozen Breaded Shrimp - both already cooked (the kind that only have to be heated) and raw (the kind that have to be cooked).

SECTION II deals with your family's use of Frozen Fish Sticks, both the already cooked ones that just have to be heated and also those that are raw and have to be cooked.

SECTION III asks about your family's consumption of fish and shellfish both at home and in restaurants. Even though you and the members of your family may find it difficult to remember, please ask them to give you the best answer possible so that you can fill in all the questions in this section.

Your answers to SECTION IV will be a great help in acquainting those interested with just how Mrs. Homemaker would like to receive information of fish and shellfish cookery.

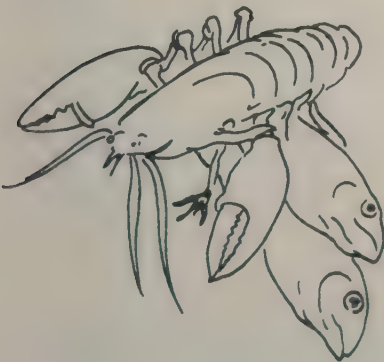
Please answer all the questions on the questionnaire as they apply to your family, being careful to follow the directions on the questionnaire.

Many thanks for your cooperation. I'll be looking for your questionnaire.

Cordially,

Carol Adams

Carol Adams
Managing Director



SECTION I - BREADED SHRIMP CONSUMPTION

1. During the past year, have you served any frozen breaded shrimp in your home that were purchased already cooked and needed only to be heated to serve?

CHECK
ONE

(1) Yes _____ (If "YES", continue with question #2)

(2) No _____ If "NO", why haven't you tried them?

If no particular reason, check here _____.

If "NO", skip to question #6.

2. If you have served breaded pre-cooked shrimp, did you like them? (Check one)

(1) Yes _____ (2) No _____

If "YES", how many times during October did you serve them? _____

(Write in number of times or "none" and continue with question #3)

If "NO", why didn't you like them?

If "NO", skip to question #6.

3. Has the use of frozen breaded pre-cooked shrimp completely replaced the serving of other fishery product(s)? (Check one)

(1) Yes _____ (2) No _____ (If "NO", continue with question #4)

If "YES", what type fishery product(s) have the frozen breaded pre-cooked shrimp completely replaced? (Check)

Fresh Fish _____ Frozen Fish _____ Canned Fish _____

Fresh Shellfish _____ Frozen Shellfish _____ Canned Shellfish _____

If Frozen Breaded Pre-cooked Shrimp has completely replaced other fishery products, skip to question #5.

4. Has the use of frozen breaded pre-cooked shrimp caused you to serve other fishery product(s) to a less extent? (Check)

(1) Yes _____ (2) No _____ (If "NO", continue with question #5)

If "YES", what type fishery product(s) have the frozen breaded pre-cooked shrimp caused you to serve to a less extent? (Check)

Fresh Fish _____ Frozen Fish _____ Canned Fish _____

Fresh Shellfish _____ Frozen Shellfish _____ Canned Shellfish _____

5. Do you prefer a light, golden colored or a darker, brown colored frozen pre-cooked breaded shrimp in the package? (Check one)

(1) Light, golden _____ (2) Darker, brown _____

6. During the past year, have you served frozen breaded shrimp in your home that were purchased not cooked and had to be cooked before serving?

CHECK
ONE

(1) Yes _____ (If "YES", continue with question #7)

(2) No _____ If "NO", why haven't you tried them?

If no particular reason, check here _____.

If "NO", skip to question #11.

NOTE: If you have used neither, frozen breaded pre-cooked or frozen breaded uncooked shrimp, skip to Section II - Question 18.

7. If you have served frozen breaded uncooked shrimp did you like them? (Check one)

(1) Yes _____ (2) No _____

If "YES", how many times during October did you serve them? _____

(Write in number of times or "none" and continue with question #8)

If "NO", why didn't you like them?

If "NO", skip to question 11.

PLEASE CONTINUE WITH QUESTIONS ON THE NEXT PAGE

8. Has the use of frozen breaded uncooked shrimp completely replaced the serving of other fishery products? (Check one)

(1) Yes _____ (2) No _____ (If "NO", continue with question #9)

If "YES", what type fishery product(s) have the frozen breaded uncooked shrimp completely replaced? (Check)

Fresh Fish _____ Frozen Fish _____ Canned Fish _____
Fresh Shellfish _____ Frozen Shellfish _____ Canned Shellfish _____

If Frozen Breaded Uncooked Shrimp has completely replaced other fishery products, skip to question #10

9. Has the use of frozen breaded uncooked shrimp caused you to serve other fishery product(s) to a less extent? (Check)

(1) Yes _____ (2) No _____ (If "NO", continue with question #10)

If "YES", what type fishery product(s) have the frozen breaded uncooked shrimp caused you to serve to a less extent? (Check)

Fresh Fish _____ Frozen Fish _____ Canned Fish _____
Fresh Shellfish _____ Frozen Shellfish _____ Canned Shellfish _____

10. If you have served both frozen breaded pre-cooked shrimp and frozen breaded uncooked shrimp, which do you prefer? (Check one)

(1) Prefer Pre-cooked _____ (2) Prefer Uncooked _____ (3) No Preference _____

Why? _____ Why? _____

11. If you have served either frozen breaded pre-cooked shrimp or frozen breaded uncooked shrimp, did the package adequately describe the contents, manner in which to prepare, and suggested recipes?

CHECK
ONE

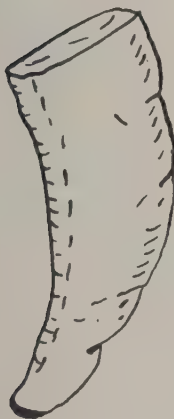
(1) Yes _____ (2) No _____

If "NO", how could the above be improved?

12. How much breading do you like on breaded shrimp? (Check one)

(1) Heavy Breading _____ (2) Medium Breading _____ (3) Thin Breading _____

13. Some sizes of breaded shrimp are shown below, write a "1" on the size you most prefer and a "2" on the size you next prefer.



14. What size package of breaded shrimp do you prefer? (Check one)

(1) 8 oz. _____

(2) 10 oz. _____

(3) 12 oz. _____

Other (write in) _____

15. What type of breaded shrimp do you prefer to buy? (Check more than one, if appropriate)

(1) Fantail (with tailshell left on) _____ (2) Completely peeled _____

Other (write in) _____

16. Do you prefer to buy packaged shrimp that are bulk frozen or frozen in layers separated by paper?

(1) Bulk _____

(2) Layers _____

(3) No Preference _____

17. For what purposes have you served breaded shrimp during the past year? (Check more than one, if appropriate)

(1) Main meal _____

(2) Snacks _____

(3) Hors d'oeuvres _____

Other (write in) _____

PLEASE CONTINUE WITH QUESTIONS ON THE NEXT PAGE

SECTION II - FISH STICKS CONSUMPTION

18. During the past year, have you served any frozen breaded fish sticks in your home that were purchased already cooked and needed only to be heated to serve?

CHECK
ONE

(1) Yes _____ (If "YES", continue with question #19)

(2) No _____ If "NO", why haven't you tried them?

If no particular reason, check here _____.

If "NO", skip to question #22.

19. If you have served frozen breaded pre-cooked fish sticks, did you like them?
(Check one)

(1) Yes _____ (2) No _____

If "YES", how many times during October did you serve them? _____

(Write in number of times or "none" and continue with question #20)

If "NO", why didn't you like them?

If "NO", skip to question #22.

20. Has the use of frozen breaded pre-cooked fish sticks completely replaced the serving of other fishery products? (Check one)

(1) Yes _____ (2) No _____ (If "NO", continue with question #21)

If "YES", what type fishery product(s) have the frozen breaded pre-cooked fish sticks completely replaced? (Check)

Fresh Fish _____	Frozen Fish _____	Canned Fish _____
Fresh Shellfish _____	Frozen Shellfish _____	Canned Shellfish _____

If Frozen Breaded Pre-cooked Fish Sticks has completely replaced other fishery products, skip to question #22

21. Has the use of frozen breaded pre-cooked fish sticks caused you to serve other fishery products to a less extent? (Check)

(1) Yes _____ (2) No _____ (If "NO", continue with question 22)

If "YES", what type fishery product(s) have the frozen breaded pre-cooked fish sticks caused you to serve to a less extent? (Check)

Fresh Fish _____ Frozen Fish _____ Canned Fish _____
Fresh Shellfish _____ Frozen Shellfish _____ Canned Shellfish _____

22. During the past year, have you served frozen breaded fish sticks in your home that were purchased not cooked and had to be cooked before serving?

CHECK
ONE

(1) Yes _____ (If "YES", continue with question #23)

(2) No _____ If "NO", why haven't you tried them?

If no particular reason, check here _____.

If "NO", skip to question #27.

NOTE: If you have used neither, frozen breaded pre-cooked or frozen breaded uncooked fish sticks, skip to Section III - Question 35.

23. If you have served frozen breaded uncooked fish sticks, did you like them?

CHECK
ONE

(1) Yes _____ (2) No _____

If "YES", how many times during October did you serve them? _____

(Write in number of times or "none" and continue with question #24)

If "NO", why didn't you like them?

If "NO", skip to question #27.

PLEASE CONTINUE WITH QUESTIONS ON THE NEXT PAGE

24. Has the use of frozen breaded uncooked fish sticks completely replaced the serving of other fishery products? (Check one)

(1) Yes _____ (2) No _____ (If "NO", continue with question #25)

If "YES", what type fishery product(s) have the frozen breaded uncooked fish sticks completely replaced? (Check)

Fresh Fish _____ Frozen Fish _____ Canned Fish _____

Fresh Shellfish _____ Frozen Shellfish _____ Canned Shellfish _____

If Frozen Breaded Uncooked Fish Sticks has completely replaced other fishery products, skip to question #26.

25. Has the use of frozen breaded uncooked fish sticks caused you to serve other fishery products to a less extent? (Check)

(1) Yes _____ (2) No _____ (If "NO", continue with question #26)

If "YES", what type fishery product(s) have the frozen breaded uncooked fish sticks caused you to serve to a less extent? (Check)

Fresh Fish _____ Frozen Fish _____ Canned Fish _____

Fresh Shellfish _____ Frozen Shellfish _____ Canned Shellfish _____

26. If you have served both frozen pre-cooked breaded fish sticks and frozen uncooked breaded fish sticks, which do you prefer? (Check one)

(1) Prefer Pre-Cooked _____ (2) Prefer Uncooked _____ (3) No Preference _____

Why? _____ Why? _____

27. If you have served either frozen pre-cooked breaded fish sticks or frozen uncooked breaded fish sticks, did the package adequately describe the contents, manner in which to prepare, and suggested recipes?

CHECK
ONE

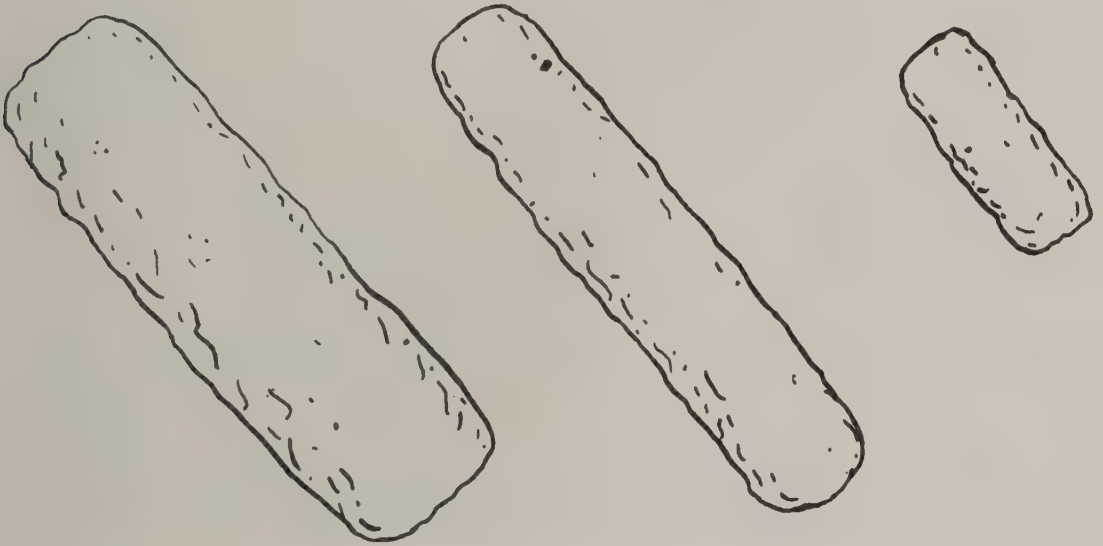
(1) Yes _____ (2) No _____

If "NO", how could the above be improved?

28. How much breading do you like on breaded fish sticks? (Check one)

(1) Heavy Breading____ (2) Medium Breading____ (3) Thin Breading____

29. Sizes of breaded fish sticks are shown below, write a "1" on the size you most prefer and a "2" on the size you next prefer.



30. What size package of breaded fish sticks do you prefer? (Check one)

(1) 8 oz. ____ (2) 10 oz. ____
(3) 12 oz. ____ Other (write in) _____

31. Do you prefer fish sticks to be not seasoned, moderately seasoned, or highly seasoned? (Check one)

(1) Not Seasoned____ (2) Moderately Seasoned____ (3) Highly Seasoned____

32. For what purposes have you served fish sticks during the past year? (Check more than one, if appropriate)

(1) Main meal ____ (2) Snacks ____
(3) Hors d'oeuvres ____ Other (write in) _____

PLEASE CONTINUE WITH QUESTIONS ON THE NEXT PAGE

33. The kind (species) of fish used in the manufacture of the fish sticks must be shown on the package. In buying fish sticks do you have a preference for the kind (species) of fish from which the fish sticks are made?

CHECK
ONE

(1) Yes _____ (2) No _____

If "YES",

- a) Which kind (species) or kinds do you prefer?

34. Are there any kind (species) of fish from which fish sticks are made that you do not like?

(1) Yes _____ (2) No _____

- a) What kind (species) do you not like?

Now we come to fish consumption in general;
including fresh, frozen, and canned fish and shellfish

SECTION III. Family Consumption of Fish (for example haddock, whitefish, salmon, swordfish, etc.) and Shellfish (for example shrimp, oysters, lobsters, crab meat, etc.)

A. FAMILY HOME CONSUMPTION

35. How many times during October did your family eat fish or shellfish as a main course at home? (Write in number or "none")

_____ times

36. Is there any season during which your family eats fish and shellfish meals more often at home than at other times during the year?

CHECK
ONE

(1) Yes _____ (2) No _____

If "YES", write the season. _____

B. GROUP RESTAURANT CONSUMPTION

37. Do you and your family as a group ever eat fish or shellfish in restaurants?

(1) Yes _____ (2) No _____ (If "NO", skip to question #40)

a) If "YES", why does your family as a group eat fish or shellfish in restaurants?

38. How many times during October did your family as a group eat in a restaurant? (Write in number or "none")

_____ times

Of these, how many times were fish and shellfish eaten as a main course by the majority of the group? (Write in number or "none")

_____ times

39. Is there any season during which your family as a group eats fish and shellfish meals more often in a restaurant than at other times during the year?

CHECK
ONE

(1) Yes _____ (2) No _____

If "YES", write season. _____

C. INDIVIDUAL CONSUMPTION AWAY FROM HOME

40. During the month of October, were there steady workers in your family?

CHECK
ONE

(1) Yes _____ (2) No _____

If "NO", skip to Section IV - Question #41.

If "YES", please write in the Sex and Age of each steady worker in your family during the month of October, and how many times each ate fish or shellfish as a main course in a restaurant or cafeteria during that month. (Write in number or "None" for BOTH restaurant and cafeteria.)

Steady Worker's			Times fish or shellfish was		
Family			eaten as main course in		
Member	Sex	Age	Restaurant	or	Cafeteria
<u>Homemaker</u>	<i>Female</i>	_____	_____		_____
<u>Husband</u>	<i>Male</i>	_____	_____		_____
<u>Other Family</u>	_____	_____	_____		_____
<u>Members</u>	_____	_____	_____		_____
	_____	_____	_____		_____

PLEASE CONTINUE WITH QUESTIONS ON THE NEXT PAGE

SECTION IV - RECIPES AND FISH COOKING

41. Do you now have enough information on fish and shellfish cookery? (Check one)

(1) Yes _____ (2) No _____

42. How do you now get information on the preparation of fish and shellfish?

43. Are there any other means of getting information on fish and shellfish cookery that would be more convenient to you?

(1) Yes _____ (2) No _____

If "YES", what are they?

44. Do you, the homemaker, work outside of your home?

(1) Yes _____ (2) No _____

If "YES", do you work: (Check)

(1) Full time _____ (2) Part time _____

SUMMARIES OF REPLIES TO QUESTIONS

1.

Breaded Shrimp Consumption

During the past year, have you served any frozen breaded shrimp in your home that were purchased already cooked and needed only to be heated to serve?

	<u>North- east</u> <u>£</u>	<u>South</u> <u>£</u>	<u>North Central</u> <u>£</u>	<u>West</u> <u>£</u>	<u>U.S. Total</u> <u>£</u>
Yes	21.4	14.9	17.6	16.7	17.7
No	77.8	83.8	81.5	83.3	81.4
Not answered, etc	.8	1.3	.9	-	.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

If "NO", why haven't you tried them?

	<u>North- east</u> <u>£</u>	<u>South</u> <u>£</u>	<u>North Central</u> <u>£</u>	<u>West</u> <u>£</u>	<u>U.S. Total</u> <u>£</u>
No particular reason	44.4	40.0	42.3	37.5	41.5
General aversion	18.0	23.0	27.0	24.9	23.2
Taste - does not like seafood or shrimp	6.6	10.7	5.5	4.9	7.2
Other preference - prefer fresh or canned fish	13.8	8.4	7.3	6.8	9.2
Never tried or not familiar with frozen breaded shrimp . .	5.0	7.3	6.3	6.8	6.4
Lack of cooking instructions . .	-	.2	-	.5	.1
Not available.	1.3	6.6	4.8	8.3	4.9
Health reasons - allergy, doctor's diet forbids, etc . .	3.2	.9	1.1	1.0	1.6
Too expensive.	5.6	2.7	5.5	8.3	5.1
Religion	2.1	.2	-	-	.6
Other reasons.	-	-	.2	1.0	.2
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	378	440	440	205	1,463

SUMMARIES OF REPLIES TO QUESTIONS

Breaded Shrimp Consumption

2.

If you have served breaded pre-cooked shrimp, did you like them?

	North- east	South	North Central	West	U.S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	88.5	87.2	87.4	85.4	87.4
No.	11.5	12.8	12.6	14.6	12.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	104	78	95	41	318

If "YES", how many times during October did you serve them?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Once	27.2	23.5	28.9	31.4	27.3
Twice.	21.7	19.1	24.1	25.7	22.3
Three times.	6.5	13.2	2.4	8.6	7.2
Four times	5.4	4.4	6.0	2.9	5.0
Five times	1.1	1.5	2.4	-	1.5
Six times	1.1	3.0	-	-	1.1
Seven times.	-	-	-	2.9	.4
Nine times or more	-	1.5	1.2	-	.7
No number given and none	37.0	33.8	35.0	28.5	34.5
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	92	68	83	35	278

If "NO", why didn't you like them?

	North- east	South	North Central	West	U.S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Tasteless	58.4	50.0	25.0	33.2	42.5
Too dry	16.7	10.0	33.4	16.7	20.0
Too small	8.3	10.0	8.3	-	7.5
Just passable	-	-	8.3	-	2.5
Do not stay warm long enough. .	8.3	-	-	-	2.5
Limp	8.3	10.0	8.3	-	7.5
Prefer shrimp cocktail.	-	-	-	16.7	2.5
Limp and tasteless.	-	-	-	16.7	2.5
Other reasons	-	10.0	-	-	2.5
No reason given	-	10.0	16.7	16.7	10.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	12	10	12	6	40

SUMMARIES OF REPLIES TO QUESTIONS

Breaded Shrimp Consumption

3.

Has the use of frozen breaded pre-cooked shrimp completely replaced the serving of other fishery products?

	North- east	South	North Central	West	U.S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	7.6	11.8	9.7	5.7	9.0
No.	91.3	86.7	89.1	94.3	89.9
Not answered, etc	1.1	1.5	1.2	-	1.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	92	68	83	35	278

If "YES", what type of fishery product(s) have the frozen breaded pre-cooked shrimp completely replaced?

	North- east	South	North Central	West	U.S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Fresh fish.	14.3	-	25.0	-	12.0
Frozen fish	-	12.5	-	-	4.0
Canned fish	14.3	-	-	50.0	8.0
Fresh shellfish	28.5	25.0	12.5	-	20.0
Fresh fish and frozen fish.	14.3	25.0	12.5	-	16.0
Fresh fish and canned fish.	-	12.5	-	-	4.0
Fresh fish and fresh shellfish.	-	12.5	-	-	4.0
Fresh fish, frozen fish and frozen shellfish.	-	-	-	50.0	4.0
Fresh fish, canned fish and fresh shellfish	14.3	-	12.5	-	8.0
Fresh shellfish, frozen shell- fish and canned shellfish	-	-	12.5	-	4.0
Fresh fish, frozen fish, canned fish and canned shellfish	-	12.5	-	-	4.0
Fresh fish, frozen fish, fresh shellfish, frozen shellfish and canned shellfish	-	-	12.5	-	4.0
No type given	14.3	-	12.5	-	8.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	7	8	8	2	25

SUMMARIES OF REPLIES TO QUESTIONS

Breaded Shrimp Consumption

4.

Has the use of frozen, breaded, pre-cooked shrimp caused you to serve other fishery products to a less extent?

	North- east	South	North Central	West	U.S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	14.1	16.2	72.3	25.7	16.9
No.	77.4	75.0	16.9	68.6	74.8
Not answered, etc	6.5	8.8	10.8	5.7	8.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked, ...	92	68	83	35	278

If "YES", what type fishery product(s) have the frozen, breaded pre-cooked shrimp caused you to serve to a less extent?

	North- east	South	North Central	West	U.S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Fresh fish	30.7	-	7.1	11.1	12.8
Frozen fish.	15.4	18.1	21.3	11.1	16.9
Canned fish.	7.7	36.4	-	11.1	12.8
Fresh shellfish.	-	9.1	-	11.1	4.3
Frozen shellfish	-	-	-	11.1	2.1
Canned shellfish	7.7	-	-	11.1	4.3
Fresh and frozen fish.	-	9.1	-	-	2.1
Fresh fish and canned fish	15.4	-	14.4	-	8.5
Fresh fish and fresh shellfish	-	-	7.1	11.1	4.3
Frozen fish and canned fish.	-	9.1	14.4	-	6.4
Canned fish and canned shellfish	7.7	-	7.2	-	4.3
Fresh shellfish and frozen shellfish.	7.7	-	7.2	-	4.3
Fresh shellfish and canned shellfish.	-	-	-	11.2	2.1
Fresh fish, frozen fish and canned fish.	7.7	9.1	7.1	-	6.4
Fresh shellfish, frozen shellfish and canned shellfish.	-	-	7.1	-	2.1
Fresh fish, canned fish, fresh shellfish and canned shellfish	-	-	-	11.1	2.1
Fresh fish, frozen fish, fresh shellfish, frozen shellfish and canned shellfish	-	-	7.1	-	2.1
No type given.	-	9.1	-	-	2.1
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	13	11	14	9	47

SUMMARIES OF REPLIES TO QUESTIONS

5.

Breaded Shrimp Consumption

Do you prefer a light, golden colored or a darker, brown colored frozen pre-cooked breaded shrimp in the package?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Light golden	79.3	83.8	79.5	85.7	81.3
Darker brown	16.3	10.3	18.1	11.4	14.7
No preference	-	-	1.2	-	.4
Not answered, etc.	4.4	5.9	1.2	2.9	3.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	92	68	83	35	278

6.

During the past year, have you served frozen breaded shrimp in your home that were purchased not cooked and had to be cooked before serving?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	15.8	25.5	20.9	24.4	21.4
No	79.4	69.9	74.6	73.6	74.4
Not answered, etc.	4.8	4.6	4.5	2.0	4.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

If "NO", why haven't you tried them?

	North- east	South	North Central	West	U.S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
No particular reason	51.6	50.1	52.6	55.2	52.0
General aversion	14.5	18.3	22.6	19.3	18.6
Taste - does not like seafood or shrimp	5.4	10.6	5.2	4.4	6.7
Other preference - prefer fresh or canned fish	14.0	7.6	7.4	5.0	9.1
Never tried or not familiar with frozen breaded shrimp	4.7	4.9	4.0	4.4	4.5
Lack of cooking instructions	-	-	-	1.1	.1
Not available.	1.8	4.6	2.0	3.3	2.8
Health reasons - allergy, doctor's diet forbids, etc.	2.6	1.1	1.2	1.8	1.3
Too expensive.	3.6	2.2	4.7	4.4	3.7
Religion	1.8	.3	-	-	.6
Other reasons.	-	.3	.3	1.1	.3
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	386	367	403	181	1,337

Breaded Shrimp Consumption

7.

If you have served frozen breaded uncooked shrimp did you like them?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	88.3	94.0	91.2	90.0	91.4
No.	11.7	6.0	8.8	10.0	8.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	77	134	113	40	264

If "YES", how many times during October did you serve them?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Once	29.4	16.7	22.3	33.3	23.4
Twice	13.2	19.8	14.6	24.1	17.7
Three times	4.5	7.9	5.9	-	5.4
Four times	2.9	14.3	3.9	5.6	7.7
Five times	-	4.0	1.9	1.9	2.3
Six times	-	2.4	1.9	-	1.4
Seven times	-	.8	-	-	.3
Eight times	-	.8	-	-	.3
No number given and none	50.0	33.3	49.5	35.1	41.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	68	126	103	54	351

If "NO" why didn't you like them?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Too dry	11.1	12.5	40.0	33.3	24.2
Tasteless	22.2	12.5	30.0	16.7	21.2
Too small	11.1	25.0	-	-	9.1
Do not stay warm long enough.	11.1	-	-	-	3.0
Limp	-	12.5	-	-	3.0
Prefer shrimp cocktail.	22.3	-	-	16.7	9.1
Too much trouble.	11.1	-	-	-	3.0
Other reasons	11.1	12.5	-	-	6.2
No reason given	-	25.0	30.0	33.3	21.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	9	8	10	6	33

SUMMARIES OF REPLIES TO QUESTIONS

8. Breaded Shrimp Consumption

Has the use of frozen breaded uncooked shrimp completely replaced the serving of other fishery products?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Yes	7.4	9.5	5.8	5.6	7.4
No.	88.2	86.5	91.3	94.4	89.5
Not answered, etc	4.4	4.0	2.9	-	3.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	68	126	103	54	351

If "YES", what type fishery product(s) have the frozen breaded uncooked shrimp completely replaced?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Fresh fish	40.0	16.7	16.7	-	19.1
Frozen fish.	-	16.7	-	33.3	11.4
Canned fish.	-	16.7	-	-	7.7
Fresh shellfish.	20.0	16.7	-	-	11.4
Frozen shellfish	-	8.3	-	-	3.9
Fresh fish and frozen fish	20.0	-	33.2	-	11.4
Fresh fish and canned fish	-	-	16.7	-	3.9
Fresh fish and fresh shellfish . .	-	-	-	33.3	3.9
Frozen fish and canned fish. . . .	20.0	-	-	-	3.9
Frozen fish and fresh shellfish. .	-	8.3	-	-	3.9
Canned fish and canned shellfish .	-	8.3	-	-	3.9
Fresh fish, canned fish and fresh shellfish.	-	-	16.7	-	3.9
Fresh shellfish, frozen shell- fish and canned shellfish. . . .	-	-	16.7	-	3.9
Fresh fish, frozen fish, canned fish, fresh shellfish, frozen shellfish and canned shellfish	-	8.3	-	-	3.9
No type given.	-	-	-	33.4	3.9
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	5	12	6	3	26

SUMMARIES OF REPLIES TO QUESTIONS

9.

Breaded Shrimp Consumption

Has the use of frozen breaded uncooked shrimp caused you to serve other fishery product(s) to a less extent?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Yes	16.2	20.6	9.7	20.4	16.5
No.	77.9	69.8	82.5	75.9	76.1
Not answered, etc	5.9	9.6	7.8	3.7	7.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	68	126	103	54	351

If "YES", what type fishery product(s) have the frozen breaded uncooked shrimp caused you to serve to a less extent?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Fresh fish	27.2	15.4	-	9.1	13.8
Frozen fish.	9.1	23.0	10.0	9.1	15.5
Canned fish.	9.1	11.6	10.0	18.2	12.1
Fresh shellfish.	-	7.7	10.0	-	5.2
Frozen shellfish	-	-	-	9.1	1.7
Canned shellfish	18.2	-	-	9.1	5.2
Fresh fish and frozen fish . . .	-	7.7	30.0	-	8.6
Fresh fish and canned fish . . .	18.2	-	20.0	-	6.9
Fresh fish and fresh shellfish .	-	-	-	18.1	3.5
Frozen fish and canned fish. . .	-	19.1	10.0	-	10.3
Fresh shellfish and frozen shellfish.	-	3.9	-	-	1.7
Fresh shellfish and canned shellfish.	-	3.9	-	9.1	3.5
Fresh fish, frozen fish and canned fish.	9.1	7.7	-	-	5.2
Frozen fish, canned fish, frozen shellfish and canned shellfish	-	-	-	9.1	1.7
Fresh fish, frozen fish, canned shellfish and frozen shellfish	-	-	10.0	-	1.7
Other types.	-	-	-	9.1	1.7
No type given.	9.1	-	-	-	1.7
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	11	26	10	11	58

SUMMARIES OF REPLIES TO QUESTIONS

Breaded Shrimp Consumption

10.

If you have served both frozen breaded pre-cooked shrimp and frozen breaded uncooked shrimp, which do you prefer?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Prefer pre-cooked	38.7	33.4	26.4	24.0	31.8
Quicker served	34.1	26.2	23.5	24.0	27.6
Browner.	-	2.4	-	-	.7
Other reasons.	2.3	-	-	-	.7
No particular reason	2.3	4.8	2.9	-	2.8
Prefer uncooked	34.1	45.2	41.2	36.0	39.3
More crisp	9.1	-	5.9	8.0	5.5
Better taste	20.4	28.5	26.5	28.0	25.5
Other reasons.	4.6	2.4	2.9	-	2.8
No particular reason	-	14.3	5.9	-	5.5
No particular preference.	27.2	21.4	32.4	40.0	28.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	44	42	34	25	145

SUMMARIES OF REPLIES TO QUESTIONS

11.

Breaded Shrimp Consumption

If you have served either frozen breaded pre-cooked shrimp or frozen breaded uncooked shrimp, did the package adequately describe the contents, manner in which to prepare, and suggested recipes?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Yes	95.7	90.4	92.3	95.7	92.5
No.	6.3	9.6	7.7	4.3	7.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	128	156	155	70	509

If "NO", how could the above (next preceding) be improved?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Cooking instructions	62.5	46.7	66.7	66.7	57.9
Give size of shrimp.	25.0	-	8.3	-	7.9
Include booklet of recipes	-	-	25.0	-	7.9
No suggestion given.	12.5	53.3	-	33.3	26.3
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	8	15	12	3	38

12.

How much breading do you like on breaded shrimp?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Heavy breading	7.8	10.6	8.8	14.1	9.9
Medium breading.	73.6	72.5	74.2	67.6	72.6
Thin breading.	18.6	16.9	17.0	18.3	17.5
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers.	129	160	159	71	519

SUMMARIES OF REPLIES TO QUESTIONS

Breaded Shrimp Consumption

13.

Sizes of breaded shrimp preferred. (See Question 13 of questionnaire in Appendix for sizes)

FIRST CHOICE

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Largest	40.3	42.1	53.3	58.0	47.3
Next largest.	37.9	41.4	34.7	24.6	36.2
Third largest	17.8	11.2	10.0	13.1	12.7
Smallest.	4.0	5.3	2.0	4.3	3.8
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	124	152	150	69	495

SECOND CHOICE

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Largest	8.3	9.4	8.7	7.2	8.6
Next largest.	52.1	49.0	58.4	69.6	55.5
Third largest	34.7	37.6	28.2	20.3	31.6
Smallest.	4.9	4.0	4.7	2.9	4.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	121	149	149	69	488

SUMMARIES OF REPLIES TO QUESTIONS

14. Breaded Shrimp Consumption

What size package of breaded shrimp do you prefer?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
8 oz.	16.3	13.9	14.6	10.1	14.2
10 oz	32.5	38.6	33.5	29.0	34.3
12 oz	45.5	43.7	43.6	53.6	45.5
16 oz	3.3	2.6	5.1	4.3	3.7
24 oz	-	-	-	1.5	.1
No particular preference. . . .	1.6	.6	1.3	-	1.0
Don't know.	.8	.6	1.9	1.5	1.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	123	158	158	69	508

15. What type of breaded shrimp do you prefer to buy?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Fantail (with shell left on). . .	28.0	52.2	44.0	45.1	42.8
Completely peeled.	68.0	42.8	50.3	53.5	52.7
Other (not specified)	-	-	1.3	-	.4
No particular preference.	4.0	5.0	4.4	1.4	4.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	125	161	159	71	516

SUMMARIES OF REPLIES TO QUESTIONS

Breaded Shrimp Consumption

16.

Do you prefer to buy packaged shrimp that are bulk frozen or frozen in layers separated by paper?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Bulk	8.6	7.5	5.6	5.5	6.9
Layers	60.1	77.6	75.2	79.4	72.8
No particular preference	31.3	14.9	19.2	15.1	20.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	128	161	161	73	523

17.

For what purposes have you served breaded shrimp during the past year?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Main meal	67.2	75.5	65.8	65.8	69.1
Snacks	9.2	6.8	6.8	4.1	7.0
Hors d'oeuvres	.7	-	-	1.4	.4
Main meal and snacks	15.3	15.3	22.4	21.9	18.4
Main meal and hors d'oeuvres	1.5	1.8	1.2	2.7	1.7
Snacks and hors d'oeuvres	2.3	-	1.9	2.7	1.5
Main meal, snacks and hors d'oeuvres	3.1	-	1.9	1.4	1.5
Other (not specified)	.7	.6	-	-	.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	131	163	161	73	528

SUMMARIES OF REPLIES TO QUESTIONS

18. Fish Stick Consumption

During the past year have you served any frozen breaded fish sticks in your home that were purchased already cooked and needed only to be heated to serve?

	North- east	South	North Central	West	U. S. Total
Yes	54.3	29.3	30.4	30.5	36.6
No.	44.5	67.1	65.9	66.3	60.5
Not answered, etc	1.2	3.6	3.7	3.2	2.9
Totals	100.0	100.0	100.0	100.0	100.0
Number asked.	486	525	540	246	1,797

If "NO", why haven't you tried them?

	North- east	South	North Central	West	U. S. Total
No particular reason	58.3	65.0	61.2	63.8	62.3
General aversion	12.0	6.3	9.8	8.6	8.9
Taste-does not like fish	6.5	3.4	2.5	2.5	3.6
Other preference-prefers fresh or canned fish or fresh shellfish.	13.0	8.8	9.6	9.8	10.0
Never tried or not familiar with fish sticks	3.7	8.2	7.9	7.3	7.1
Lack of cooking instructions	-	-	-	.6	.1
Not available	1.9	6.8	5.6	3.7	4.9
Health reasons-allergy, doctor's diet forbids, etc	1.9	.6	1.1	1.2	1.1
Too expensive.	2.3	.3	2.0	2.5	1.6
Religion	.4	.3	-	-	.2
Other reasons.	-	.3	.3	-	.2
Totals.	100.0	100.0	100.0	100.0	100.0
Number asked	216	352	356	163	1,087

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

19.

If you have served frozen breaded pre-cooked fish sticks, did you like them?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	89.1	88.2	85.4	79.7	86.9
No.	10.9	11.8	14.6	20.3	13.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	267	152	164	74	657

If "YES", how many times during October did you serve them?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Once	21.0	30.0	29.3	27.1	25.7
Twice	33.2	20.1	29.3	11.9	27.0
Three times.	11.4	11.2	7.8	8.5	10.2
Four times	9.7	9.7	4.3	10.1	8.4
Five times	-	1.5	2.9	3.4	1.4
Six times.	.8	.7	.7	-	.7
Seven times.	.8	.7	.7	-	.7
Eight times.	1.3	-	-	-	.5
Nine times or more	.8	1.5	-	-	.7
No number given and none	21.0	24.6	25.0	39.0	24.7
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	238	134	140	59	571

If "NO", why didn't you like them?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Tasteless	34.5	16.7	45.8	40.0	34.9
Fishy in taste.	24.2	5.5	16.6	6.7	15.1
Limp	10.3	16.7	12.5	20.0	14.0
Prefer shrimp cocktail.	10.3	5.5	12.5	6.7	9.3
Too dry.	3.5	16.7	4.2	6.7	7.0
Too small	6.9	-	4.2	-	3.5
Do not stay warm long enough. . .	-	-	-	6.7	1.1
Other reasons	-	5.5	-	-	1.1
No reason given	10.3	33.4	4.2	13.2	14.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	29	18	24	15	86

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

20.

Has the use of frozen breaded pre-cooked fish sticks completely replaced the serving of other fishery products?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	8.4	8.2	4.3	5.1	7.0
No.	90.8	90.3	91.4	93.2	91.1
Not answered, etc	.8	1.5	4.3	1.7	1.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	238	134	140	59	571

If "YES", what type fishery product(s) have the frozen breaded pre-cooked fish sticks completely replaced?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Fresh fish	35.0	18.2	16.7	33.3	27.5
Frozen fish.	20.0	-	16.7	33.3	15.0
Canned fish.	-	9.1	-	-	2.5
Fresh fish and frozen fish	20.0	9.1	33.2	33.4	20.0
Fresh fish and canned fish	10.0	-	-	-	5.0
Frozen fish and canned fish.	5.0	9.1	-	-	5.0
Fresh fish, frozen fish and canned fish.	-	18.2	-	-	5.0
Fresh fish, canned fish and fresh shellfish.	-	-	16.7	-	2.5
Fresh fish, frozen fish, canned fish and canned shellfish.	-	9.1	-	-	2.5
Frozen fish, canned fish, frozen shellfish and canned shellfish.	-	-	16.7	-	2.5
Fresh fish, frozen fish, fresh shellfish, frozen shellfish and canned shellfish.	-	9.1	-	-	2.5
No type given.	10.0	18.1	-	-	10.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	20	11	6	3	40

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

21.

Has the use of frozen breaded pre-cooked fish sticks caused you to serve other fishery products to a less extent?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	24.4	17.9	19.3	20.3	21.2
No	66.8	73.9	72.9	72.9	70.6
Not answered, etc	8.8	8.2	7.8	6.8	8.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	238	134	140	59	571

If "YES", what type fishery product(s) have the frozen breaded pre-cooked fish sticks caused you to serve to a less extent?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Fresh fish	29.3	20.8	18.6	33.4	25.7
Frozen fish.	13.8	20.8	25.9	8.3	17.4
Canned fish.	6.9	8.3	14.8	-	8.3
Fresh shellfish.	3.5	-	-	-	1.7
Frozen shellfish	1.7	-	3.7	-	1.7
Fresh fish and frozen fish	8.6	25.1	7.4	-	10.7
Fresh fish and canned fish	12.1	8.3	11.1	16.7	11.6
Fresh fish and fresh shellfish	-	-	-	8.3	.8
Frozen fish and canned fish.	5.2	8.3	3.7	16.7	6.6
Canned fish and canned shellfish	1.7	-	-	-	.8
Fresh fish, frozen fish and canned fish.	3.5	4.2	11.1	-	5.0
Fresh fish, frozen fish, fresh shellfish and frozen shellfish	1.7	-	-	-	.8
Fresh fish, fresh shellfish and canned shellfish.	-	-	-	8.3	.8
Frozen fish, frozen shellfish and canned fish.	-	-	-	8.3	.8
Fresh fish, fresh shellfish, canned fish and canned shellfish	1.7	-	-	-	.8
Fresh fish, fresh shellfish, frozen shellfish and canned shellfish	-	4.2	-	-	.8
Fresh fish, frozen fish, frozen shell- fish, canned fish and canned shellfish	1.7	-	-	-	.8
Fresh fish, frozen fish, fresh shellfish, frozen shellfish and canned shellfish.	1.7	-	-	-	.8
Frozen fish, canned fish, fresh shellfish, frozen shellfish and canned shellfish.	1.7	-	-	-	.8
Fresh fish, frozen fish, canned fish, fresh shellfish, frozen shellfish and canned shellfish	1.7	-	-	-	.8
No type given.	<u>3.5</u>	-	<u>3.7</u>	-	<u>2.5</u>
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	58	24	27	12	121

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

22.

During the past year have you served frozen breaded fish sticks in your home that were purchased not cooked and had to be cooked before serving?

	North-east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Yes	6.2	13.0	10.0	9.4	9.8
No.	88.5	81.9	82.4	82.9	84.0
Not answered, etc	5.3	5.1	7.6	7.7	6.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

If "NO", why haven't you tried them?

	North-east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
No particular reason	62.6	65.6	65.6	64.7	64.6
General aversion	6.7	5.8	8.8	7.3	7.2
Taste—does not like fish	3.0	1.9	1.8	2.4	2.3
Other preference — prefers fresh or canned fish or fresh shellfish.	14.9	11.2	11.0	10.3	12.1
Never tried or not familiar with fish sticks	5.4	7.5	5.6	5.4	6.0
Lack of cooking instructions . .	.2	—	—	1.0	.2
Not available.	4.2	6.7	4.9	6.4	5.4
Health reasons—allergy, doctor's diet forbids, etc . .	1.2	.2	.9	1.0	.8
Too expensive.	.7	.7	.9	1.0	.8
Religion	.2	.2	—	—	.1
Other reasons.	.9	.2	.5	.5	.5
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	430	430	445	204	1,509

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

23.

If you have served frozen breaded uncoked fish sticks, did you like them?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Yes	87.3	89.7	88.9	91.3	88.6
No.	16.7	10.3	11.1	8.7	11.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	30	68	54	23	175

If "YES", how many times during October did you serve them?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Once	48.0	29.5	29.2	23.8	31.6
Twice	20.0	19.7	12.5	28.6	18.7
Three times.	16.0	9.9	6.2	9.5	9.7
Four times	-	6.6	10.4	-	5.8
Five times	-	1.6	4.2	-	1.9
Six times.	-	-	2.1	-	.7
Eight times.	-	1.6	-	-	.7
No number given and none	16.0	31.1	35.4	38.1	30.9
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	25	61	48	21	155

If "NO", why didn't you like them?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Tasteless	80.0	28.6	33.2	50.0	45.0
Limp	-	42.8	-	-	15.0
Prefer shrimp cocktail.	20.0	-	16.7	-	10.0
Too dry	-	-	-	50.0	5.0
Do not stay warm long enough. . .	-	-	16.7	-	5.0
Other reasons	-	-	16.7	-	5.0
No reason given	-	28.6	16.7	-	15.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	5	7	6	2	20

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

24.

Has the use of frozen breaded uncooked fish sticks completely replaced the serving of other fishery products?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Yes	12.0	21.3	6.3	-	12.3
No.	88.0	78.7	93.7	85.7	85.8
Not answered, etc	-	-	-	14.3	1.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	25	61	48	21	155

If "YES", what type fishery product(s) have the frozen breaded uncooked fish sticks completely replaced?

	North- east	South	North Central	West	U. S. Total
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Fresh fish	33.3	7.7	66.7	-	21.0
Frozen fish.	-	23.1	-	-	15.8
Canned fish.	33.3	7.7	-	-	10.5
Fresh fish and frozen fish	-	7.7	-	-	5.3
Fresh fish and canned fish	33.4	7.7	-	-	10.5
Frozen fish and canned fish. . . .	-	7.7	-	-	5.3
Fresh fish, frozen fish and canned fish.	-	23.0	33.3	-	21.0
Fresh fish, frozen fish, canned fish, fresh shellfish, frozen shellfish and canned shellfish .	-	7.7	-	-	5.3
No type given.	-	7.7	-	-	5.3
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	3	13	3	-	19

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

25.

Has the use of frozen breaded uncooked fish sticks caused you to serve other fishery products to a less extent?

	North- east	South	South Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	12.0	14.7	20.8	14.3	16.1
No.	84.0	65.6	77.1	61.9	71.6
Not answered, etc	4.0	19.7	2.1	23.8	12.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	25	61	48	21	155

If "YES", what type fishery product(s) have the frozen breaded uncooked fish sticks caused you to serve to a less extent?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Fresh fish	33.3	55.6	20.0	-	32.0
Frozen fish.	33.3	22.2	50.0	33.3	36.0
Canned fish.	-	11.1	-	-	4.0
Frozen shellfish	-	-	10.0	-	4.0
Fresh fish and frozen fish	-	-	10.0	33.3	8.0
Frozen fish and canned fish. . . .	-	-	10.0	33.4	8.0
Frozen fish, canned fish and frozen shellfish	33.4	-	-	-	4.0
No type given.	-	11.1	-	-	4.0
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	3	9	10	3	25

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

26.

If you have served both frozen pre-cooked breaded fish sticks and frozen uncooked breaded fish sticks, which do you prefer?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Prefer pre-cooked	47.6	54.2	19.2	40.0	39.6
Quicker served	42.8	54.2	19.2	40.0	38.3
No particular reason	4.8	-	-	-	1.3
Prefer uncooked	9.6	20.8	38.5	30.0	24.6
Better taste	4.8	12.5	23.1	20.0	14.8
More crisp	-	-	11.5	10.0	4.9
Other reasons.	4.8	8.3	3.9	-	4.9
No particular preference.	42.8	25.0	42.3	30.0	35.8
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	21	24	26	10	81

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

27.

If you have served either frozen pre-cooked breaded fish sticks or frozen uncooked breaded fish sticks, did the package adequately describe the contents, manner in which to prepare, and suggested recipes?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	96.3	92.2	94.3	91.1	94.1
No.	3.7	7.8	5.7	8.9	5.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	246	166	175	79	666

If "NO", how could the above (next preceding) be improved?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Cooking instructions	77.8	38.5	30.0	42.8	46.2
Include booklet of recipes	22.2	-	20.0	14.3	12.8
Give size of fish sticks	-	-	-	14.3	2.6
No particular suggestions.	-	7.7	10.0	-	5.1
No suggestion given.	-	53.8	40.0	28.6	33.3
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers.	9	13	10	7	39

28.

How much breading do you like on breaded fish sticks?

	North east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Heavy breading	8.6	12.6	10.2	13.0	10.6
Medium breading.	79.2	75.3	79.1	77.9	78.0
Thin breading.	12.2	12.1	10.7	9.1	11.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers.	255	174	177	77	683

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

29.

Sizes of breaded fish sticks preferred. (See Question 29 of Questionnaire in Appendix for sizes.)

FIRST CHOICE

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Largest	54.5	54.3	58.0	53.5	55.2
Next largest.	42.6	40.8	40.8	46.5	42.1
Smallest.	2.9	4.9	1.2	—	2.7
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	244	164	162	71	641

SECOND CHOICE

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>	<u>%</u>
Largest	32.2	28.1	29.5	38.2	31.1
Next largest.	52.2	58.8	59.0	53.0	55.7
Smallest.	15.6	13.1	11.5	8.8	13.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	230	160	156	68	614

SUMMARIES OF REPLIES TO QUESTIONS

30.

Fish Stick Consumption

What size package of breaded fish sticks do you prefer?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
8 oz.	18.2	18.6	14.8	17.4	17.3
10 oz	30.0	32.8	31.3	36.0	31.7
12 oz *	46.6	42.4	47.1	44.0	45.3
16 oz	2.8	4.0	5.1	1.3	3.6
24 oz	.4	-	-	-	.2
Others (size not given)	.4	1.1	-	1.3	.6
Don't know.	1.6	1.1	1.7	-	1.3
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	247	177	176	75	675

* Although a 12-ounce package is not known to be produced, nevertheless respondents expressed their preference as indicated.

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

31.

Do you prefer fish sticks to be not seasoned, moderately seasoned, or highly seasoned?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Not seasoned	12.1	11.0	12.9	14.3	12.3
Moderately seasoned.	85.2	78.5	83.2	83.1	82.6
Highly seasoned.	2.7	10.5	3.9	2.6	5.1
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers.	256	181	179	77	693

32.

For what purposes have you served fish sticks during the past year?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Main meal	84.1	79.5	83.2	80.3	82.2
Snacks.	6.6	6.6	4.5	3.9	5.8
Hors d'oeuvres.	.4	.6	-	-	.3
Main meal and snacks.	6.2	12.7	11.7	14.5	10.2
Main meal and hors d'oeuvres. . .	1.5	-	-	-	.6
Snacks and hors d'oeuvres	-	.6	.6	-	.3
Main meal, snacks and hors d'oeuvres.	1.2	-	-	1.3	.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	258	181	179	76	694

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

33.

The kind (species) of fish used in the manufacture of the fish sticks must be shown on the package. In buying fish sticks do you have a preference for the kind (species) of fish from which the fish sticks are made?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	37.2	38.9	41.1	30.3	37.9
No.	62.8	61.1	58.9	69.7	62.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	250	162	175	76	663

If "YES", which kind (species) or kinds do you prefer?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Haddock	43.0	17.5	15.3	4.4	25.1
Cod.	25.8	20.6	15.3	13.0	20.3
Ocean perch	5.4	20.6	26.3	8.7	15.5
Flounder or sole.	11.8	6.3	1.4	13.0	7.6
Halibut	4.3	3.2	4.2	39.0	7.2
Rockfish.	-	-	-	4.4	.4
Certain fresh-water fish	-	-	4.2	4.4	1.6
Other salt-water fish	-	1.6	-	4.4	.8
"Other" fish.	-	4.8	-	-	1.2
No particular species listed.	9.7	25.4	33.3	6.7	20.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	93	63	72	23	251

SUMMARIES OF REPLIES TO QUESTIONS

Fish Stick Consumption

34.

Are there any kind (species) of fish from which fish sticks are made that you do not like?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	10.2	19.1	18.1	14.5	15.0
No.	89.8	80.9	81.9	85.5	85.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	205	136	144	69	554

If "YES", what kind (species) do you not like?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Cod	57.1	23.0	57.6	30.0	43.4
Haddock	4.8	3.9	11.5	-	6.0
Ocean perch	4.8	3.9	3.9	-	3.6
Rockfish	4.8	3.9	-	10.0	3.6
Halibut	-	7.7	-	-	2.4
Mullet	-	3.9	-	-	1.3
Certain fresh-water fish	-	7.7	3.9	-	3.6
Other salt-water fish	-	11.5	-	-	3.6
No particular species listed. . .	28.5	34.5	23.1	60.0	32.5
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of answers	21	26	26	10	83

SUMMARIES OF REPLIES TO QUESTIONS

35. A. Family Home Consumption

How many times during October did your family eat fish or shellfish as a main course at home?

	North- east	South	North Central	West	U. S. Total
None	11.7	22.8	21.5	17.4	18.7
Once	4.5	7.8	8.2	7.7	7.0
Twice.	11.5	14.7	16.8	17.9	14.9
Three times.	9.5	9.9	10.4	14.6	10.6
Four times	26.3	17.7	21.1	20.7	21.5
Five times	14.0	6.3	3.1	4.1	8.6
Six times.	3.0	6.1	5.6	4.9	6.3
Seven times.	3.1	1.7	1.3	.8	1.9
Eight times.	6.2	2.7	1.7	4.5	3.6
Nine times or more.	2.9	3.6	1.8	3.3	2.8
Not answered, etc.	2.3	6.7	3.5	4.1	4.1
Totals.	100.0	100.0	100.0	100.0	100.0
Number asked	486	525	540	246	1,797

36.

Is there any season during which your family eats fish and shellfish meals more often at home than at other times during the year?

	North- east	South	North Central	West	U. S. Total
Yes	45.9	40.2	44.8	29.7	41.7
No.	51.0	52.2	50.9	63.8	53.1
Not answered, etc	3.1	7.6	4.3	6.5	5.2
Totals	100.0	100.0	100.0	100.0	100.0
Number asked.	486	525	540	246	1,797

If "YES", what is the season?

	North- east	South	North Central	West	U. S. Total
Lent	38.5	9.5	31.0	20.6	26.1
Summer	29.1	24.6	19.8	35.6	25.5
Winter	16.6	22.7	15.7	15.1	17.9
Spring	5.8	19.0	14.9	12.3	13.1
Fall	.5	7.6	4.1	1.4	3.7
"R" months	1.4	1.9	3.3	2.7	2.3
Advent	.5	-	.8	-	.4
Fall and winter.	2.7	9.0	5.4	4.1	5.5
No season given.	4.9	5.7	5.0	8.2	5.5
Totals.	100.0	100.0	100.0	100.0	100.0
Number asked	223	211	242	73	749

SUMMARIES OF REPLIES TO QUESTIONS

B. Group Restaurant Consumption

37.

Do you and your family as a group ever eat fish or shellfish in restaurants?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
Yes	52.9	33.9	41.1	49.6	43.4
No, ...	45.0	61.1	55.0	47.2	53.0
Not answered, etc	2.1	5.0	3.9	3.2	3.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	486	525	540	246	1,797

If "YES", why does your family as a group eat fish or shellfish in restaurants?

	<u>North- east</u>	<u>South</u>	<u>North Central</u>	<u>West</u>	<u>U. S. Total</u>
Like fish or shellfish	35.4	37.1	32.0	47.5	36.7
Restaurants prepare fish or shellfish better	14.4	21.9	16.2	18.9	17.3
More varied selections available	18.3	15.2	18.4	9.0	16.2
Don't like to cook fish at home. .	7.8	5.6	4.9	8.2	6.6
Price moderate	2.3	3.9	1.8	3.3	2.7
Eat out on Friday	6.2	2.3	8.1	1.6	5.2
Treat for family	3.9	3.9	8.6	1.6	4.9
Other reasons	-	-	.5	-	a/
No reason given	11.7	10.1	9.5	9.9	10.4
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	257	178	222	122	779

a/ Less than .05 percent

SUMMARIES OF REPLIES TO QUESTIONS

38.

B. Group Restaurant Consumption

How many times during October did your family as a group eat in a restaurant?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
None	36.9	38.7	32.9	31.1	35.3
Once	14.8	13.5	19.4	14.8	15.8
Twice.	13.2	12.4	14.9	13.9	14.4
Three times.	8.2	12.4	9.0	9.0	9.5
Four times	10.5	6.2	6.8	11.5	8.6
Five times	4.3	5.0	4.0	3.3	4.2
Six times.	4.7	1.7	3.6	4.1	3.6
Seven times.	.4	1.1	.9	-	.6
Eight times.	2.3	2.8	3.6	2.4	2.8
Nine times or more	4.7	6.2	3.6	4.9	4.7
Not answered, etc.	-	-	1.3	-	.5
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	257	178	222	122	779

Of these, how many times were fish and shellfish eaten as a main course by the majority of the group?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
None	17.9	14.7	24.8	10.7	18.1
Once	26.6	31.2	35.6	39.3	32.3
Twice.	32.1	23.9	20.8	28.6	26.4
Three times.	12.3	15.6	7.4	9.5	11.1
Four times	6.2	6.4	6.0	7.1	6.3
Five times	.6	2.8	2.7	2.4	2.0
Six times.	2.5	1.8	1.3	2.4	2.0
Seven times.	-	.9	-	-	.2
Eight times.	.6	-	.7	-	.4
Nine times or more	.6	1.8	-	-	.6
Not answered, etc.	.6	.9	.7	-	.6
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	162	109	149	84	504

SUMMARIES OF REPLIES TO QUESTIONS

B. Group Restaurant Consumption

39.

Is there any season during which your family as a group eats fish and shellfish meals more often in restaurants than at other times during the year?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	29.2	26.4	20.3	15.6	23.9
No.	69.3	69.6	77.0	83.6	73.8
Not answered, etc	1.5	4.0	2.7	.8	2.3
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	257	178	222	122	779

If "YES", write season.

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Summer	50.7	17.0	33.3	26.3	35.4
Winter	8.0	29.8	26.7	15.8	18.8
Spring	2.7	2.1	4.4	5.3	3.2
Fall	2.7	12.8	6.7	10.5	7.0
Fall and winter.	5.3	10.6	-	5.3	5.4
Lent	20.0	17.0	24.5	10.5	19.4
"R" months	5.3	6.4	-	-	3.8
No particular season	5.3	4.3	4.4	26.3	7.0
Totals.	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked	75	47	45	19	186

SUMMARIES OF REPLIES TO QUESTIONS
C. Individual Consumption Away From Home

40.

During the month of October, were there steady workers in your family?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	85.2	73.9	76.9	80.5	78.7
No.	12.5	22.5	18.3	15.4	17.6
Not answered, etc	2.3	3.6	4.8	4.1	3.7
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

The number of responses to the latter part of this question was inadequate for statistical purposes.

SUMMARIES OF REPLIES TO QUESTIONS
Recipes and Fish Cooking

41.

Do you now have enough information on fish and shellfish cookery?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	56.0	46.1	50.9	50.4	50.8
No.	39.3	44.8	42.0	43.5	42.3
Not answered, etc	4.7	9.1	7.1	6.1	6.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

SUMMARIES OF REPLIES TO QUESTIONS

Recipes and Fish Cooking

42.

How do you now get information on the preparation of fish and shellfish?

	North-east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Cookbooks	46.3	41.3	48.7	46.0	45.5
Labels, wrappers, etc	10.7	11.4	13.3	13.0	12.0
Publications, (magazines, newspapers, etc.)	12.6	8.7	9.8	14.2	10.9
Word of mouth	8.6	4.8	4.8	4.9	5.8
Family recipes.	6.8	4.8	3.4	6.5	5.1
Radio and TV.	1.2	1.0	.9	.8	1.0
Recipes and pamphlets received in stores	.4	.6	.6	.8	.6
Other means	-	-	-	.4	.1
Not answered, etc	13.4	27.4	18.5	13.4	19.0
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

43.

Are there any other means of getting information on fish and shellfish cookery that would be more convenient to you?

	North-east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	21.4	13.7	20.7	20.3	18.8
No.	67.5	64.8	63.5	64.2	65.1
Not answered, etc	11.1	21.5	15.8	15.5	16.1
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

If "YES", what are they?

	North-east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Publications, (magazines, newspapers, etc.)	24.0	25.0	33.0	38.0	29.3
Cookbooks	32.7	33.3	24.1	24.0	28.7
Labels, wrappers, etc.	22.1	18.0	19.6	6.0	18.0
Radio and TV.	10.6	12.5	6.3	8.0	9.2
Recipes and pamphlets received in stores	4.8	5.6	9.8	20.0	8.9
Word of mouth	4.8	2.8	6.3	4.0	4.7
Family recipes.	1.0	1.4	-	-	.6
Other means	-	1.4	.9	-	.6
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	104	72	112	50	338

SUMMARIES OF REPLIES TO QUESTIONS

Recipes and Fish Cooking

44.

Do you, the homemaker, work outside of your home?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Yes	25.3	26.9	24.1	30.5	26.1
No.	74.5	71.4	74.8	69.5	73.0
Not answered, etc	.2	1.7	1.1	-	.9
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	486	525	540	246	1,797

If "YES", do you work full time or part time?

	North- east	South	North Central	West	U. S. Total
	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>2</u>
Full time	44.7	49.6	46.9	53.3	48.2
Part time	55.3	50.4	52.3	46.7	51.6
Not answered, etc	-	-	.8	-	.2
Totals	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number asked.	123	141	130	75	469

